Remarks/ Arguments

Upon entry of the foregoing amendments, claims 24 to 38 will be pending in the present patent application. Claims 1 to 23 have been canceled, without prejudice. Claims 24, 26, 30, and 34 have been amended. No new matter has been added.

The Action includes rejections under 35 U.S.C. § 102(e). In view of the following remarks, reconsideration and withdrawal of the rejections are requested respectfully.

Discussion of the Rejections Under 35 U.S.C. § 102(e)

Claims 1 to 38 have been rejected under §102(e) as allegedly being anticipated by U.S. patent Publication No. 2004/0144399 to McDermott et al. ("the 399 publication"). Applicants respectfully traverse this rejection because the 399 publication does not disclose each and every element of the claimed invention as amended above. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ.2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

The present application has been amended such that claims 24 to 38 are the only pending claims. As such, Applicants' claimed invention defines a dense cleaning fluid comprising "at least one *derivatized* acetylenic alcohol or a *derivatized* acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (*see, .e.g.*, claim 24) (emphasis added).

The Action mistakenly alleges that claims 24-38 are anticipated by the 399 publication because the 399 publication at Table II (page 8) discloses that Surfynol™ and Dynol™ surfactants are used in conjunction with the dense fluids described therein (Action at 3).

Significantly, however, neither SurfynolTM nor DynolTM include a *derivatized* acetylenic alcohol or a *derivatized* acetylenic diol as defined by Applicants' claims. Although SurfynolTM and DynolTM are produced by reacting various amounts of ethylene oxide with an acetylenic diol, the acetylenic diol is *not derivatized* with "at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (*see, .e.g.*, claim 24). Thus, for at least this reason, the 399 publication does not teach or suggest each and every limitation of pending claims 24 to 38. Accordingly, reconsideration and withdrawal of the rejection are requested respectfully.

Claims 1 to 25 have been rejected under §102(e) as allegedly being anticipated by U.S. patent Publication No. 2004/0068027 to Daly et al. ("the 027 publication"). Applicants respectfully traverse this rejection because the 027 publication does not disclose each and every element of the claimed invention as amended above. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ.2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

The present application has been amended such that claims 24 and 25 are the only claims pending that are relevant to the rejection concerning the 027 publication. As such, Applicants' claimed invention defines a dense cleaning fluid comprising "at least one derivatized acetylenic alcohol or a derivatized acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (see, .e.g., claim 24) (emphasis added).

The Action mistakenly alleges that claims 24-25 are anticipated by the 027 publication because the 027 publication at paragraph [0040] discloses that an acetylenic diol can be

used in conjunction with the dense fluids disclosed therein (Action at 8). Significantly, however, such generic disclosure of the term "acetylenic diol" is not sufficient to place Applicants' claimed invention in the public's possession as is required by 35 U.S.C. § 102. See MPEP § 2131.02 (where a genus is disclosed, anticipation can only be found if the classes are sufficiently limited such that one of ordinary skill in the art is able to "at once envisage" the species.). Indeed, the Action has provided no evidence or technical reasoning to demonstrate that one of ordinary skill in art presented with the 027 poublication's generic disclosure of the term "acetylenic diol" would envisage a dense cleaning fluid comprising "at least one derivatized acetylenic alcohol or a derivatized acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (claim 24). Thus, for at least this reason, the 027 publication does not teach or suggest each and every limitation of pending claims 24 and 25. Accordingly, reconsideration and withdrawal of the rejection are requested respectfully.

Claims 1 to 25 have been rejected under §102(e) as allegedly being anticipated by U.S. patent Publication No. 2001/0023237 to Dirk et al. ("the 237 publication"). Applicants respectfully traverse this rejection because the 237 publication does not disclose each and every element of the claimed invention as amended above. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ.2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

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The 237 publication became publicly available on September 20, 2001 – more than one year before the earliest priority date of the present patent application (August 5, 2003). Accordingly, the 237 publication appears to qualify as prior art under 35 U.S.C. § 102(b).

The present application has been amended such that claims 24 and 25 are the only claims pending that are relevant to the rejection concerning the 027 publication. As such, Applicants' claimed invention defines a dense cleaning fluid comprising "at least one derivatized acetylenic alcohol or a derivatized acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (see, .e.g., claim 24) (emphasis added).

The Action mistakenly alleges that claims 24 and 25 are anticipated by the 399 publication because the 237 publication at Example 4 (page 8) discloses that Surfynol™ 440 is used in conjunction with the dense fluids described therein (Action at 10). Significantly, however, Surfynol™ does not include a *derivatized* acetylenic alcohol or a *derivatized* acetylenic diol as defined by Applicants' claims. Although Surfynol™ surfactants are produced by reacting various amounts of ethylene oxide with an acetylenic diol, the acetylenic diol is *not derivatized* with "at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (*see*, .e.g., claim 24). Thus, for at least this reason, the 237 publication does not teach or suggest each and every limitation of pending claims 24 and 38. Accordingly, reconsideration and withdrawal of the rejection are requested respectfully.

Claims 1 to 38 have been rejected under §102(e) as allegedly being anticipated by U.S. patent Publication No. 2004/0055621 to McDermott et al. ("the 621 publication").

Applicants respectfully traverse this rejection because the 621 publication does not disclose each and every element of the claimed invention as amended above. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ.2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated")

only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

The present application has been amended such that claims 24 to 38 are the only pending claims. As such, Applicants' claimed invention defines a dense cleaning fluid comprising "at least one *derivatized* acetylenic alcohol or a *derivatized* acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (*see, .e.g.*, claim 24) (emphasis added).

The Actioin mistakenly alleges that claims 24-38 are anticipated by the 621 publiction because the 621 publication at paragraph [0140] discloses that acetylenic alcohols and diols can be used in conjunction with the dense fluids disclosed therein (Action at 13).

Significantly, however, such generic disclosure of the term "acetylenic alcohols and diols" is not sufficient to place Applicants' claimed invention in the public's possession as is required by 35 U.S.C. § 102. See MPEP § 2131.02 (where a genus is disclosed, anticipation can only be found if the classes are sufficiently limited such that one of ordinary skill in the art is able to "at once envisage" the species.). Indeed, the Action has provided no evidence or technical reasoning to demonstrate that one of ordinary skill in art presented with the 621 poublication's generic disclosure of the term "acetylenic alcohols and diols" would envisage a dense cleaning fluid comprising "at least one derivatized acetylenic alcohol or a derivatized acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (claim 24). Thus, for at least this reason, the 621 publication does not teach or suggest each and every limitation of

pending claims 24 to 38. Accordingly, reconsideration and withdrawal of the rejection are requested respectfully.

Claims 1 to 38 have been rejected under §102(e) as allegedly being anticipated by U.S. patent Publication No. 2004/0055624 to McDermott et al. ("the 624 publication"). Applicants respectfully traverse this rejection because the 624 publication does not disclose each and every element of the claimed invention as amended above. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ.2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

The present application has been amended such that claims 24 to 38 are the only pending claims. As such, Applicants' claimed invention defines a dense cleaning fluid comprising "at least one *derivatized* acetylenic alcohol or a *derivatized* acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (*see, .e.g.*, claim 24) (emphasis added).

The Actioin mistakenly alleges that claims 24-38 are anticipated by the 624 publiction because the 624 publication at paragraph [0024] discloses that "acetylenic alcohols [and] acetylenic diols" can be used in conjunction with the dense fluids disclosed therein (Action at 13). Significantly, however, such generic disclosure of the term "acetylenic alcohols [and] acetylenic diols" is not sufficient to place Applicants' claimed invention in the public's possession as is required by 35 U.S.C. § 102. See MPEP § 2131.02 (where a genus is disclosed, anticipation can only be found if the classes are sufficiently limited such that one of ordinary skill in the art is able to "at once envisage" the species.). Indeed, the Action has provided no evidence or technical reasoning to demonstrate that one of ordinary skill in art

presented with the 624 poublication's generic disclosure of the term "acetylenic alcohols [and] acetylenic diols" would envisage a dense cleaning fluid comprising "at least one derivatized acetylenic alcohol or a derivatized acetylenic diol wherein the derivatized alcohol or the derivatized diol comprises at least one interactive functional group selected from the group consisting of an amine, an acid, an ester, an ether, an alcohol, a nitrile, a carbonate, and combinations thereof" (claim 24). Thus, for at least this reason, the 624 publication does not teach or suggest each and every limitation of pending claims 24 to 38. Accordingly, reconsideration and withdrawal of the rejection are requested respectfully.

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Conclusion

Applicants believe that the foregoing constitutes a complete and full response to the Action of record. Applicants respectfully submit that this application is now in condition for allowance. Accordingly, an indication of allowability and an early Notice of Allowance are

respectfully requested.

The Commissioner is hereby authorized to charge the fee required and any additional

fees that may be needed to Deposit Account No. 01-0493 in the name of Air Products and

Chemicals, Inc.

Respectfully submitted,

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